

LISTING OF CLAIMS

Claim 1 (currently amended). Method of transporting packets between an access interface of a subscriber installation and a concentrating router of a shared network, comprising the steps of:

carrying out, at the access interface, non-signature analysis control operations on streams of packets transmitted to the concentrating router, within the framework of a contract between the subscriber and a manager of the shared network, and

after having carried out the control operations concerning a packet to be transmitted, transmitting said packet from the access interface to the concentrating router, each packet being transmitted with a signature based on a secret shared with the concentrating router, authenticating that the packet has been subjected to the control operations.

Claim 2 (original). Method according to claim 1, wherein the signature consists of a code word added to the content of the packet.

Claim 3 (previously presented). Method according to claim 2, wherein said code word is calculated by hashing at least part of a content of the packet, involving the shared secret.

Claim 4 (original). Method according to claim 1, wherein the signature consists of an enciphering of a content of the packet by means of a private key forming said shared secret.

Claim 5 (currently amended). Method according to claim 1, wherein the method further comprises a step of obtaining the signature and a step of carrying out at least some of the control operations which are carried out within a single integrated circuit, said steps of obtaining the signature and carrying out at least some of the control operations being carried out in a single integrated circuit without any physical access immediately upstream of a module of the integrated circuit, said module adapted to obtain the signature.

Claim 6 (currently amended). Access interface for linking an access router of a subscriber installation to a concentrating router of a shared network, comprising:

non-signature analysis means for controlling streams of packets transmitted to the concentrating router, within the framework of a contract between the subscriber and a manager of the shared network, and

signature means receiving the packets delivered by the stream control means and producing signed packets transmitted to the concentrating router, each transmitted packet being signed and each signed packet comprising a signature based on a secret shared with the concentrating router, authenticating that the packet has been subjected to the stream control means.

Claim 7 (original). Interface according to claim 6, wherein the signature consists of a code word added to the content of the packet.

Claim 8 (original). Interface according to claim 7, wherein the signature means include means for calculating said code word by hashing at least part of a content of the packet, involving the shared secret.

Claim 9 (original). Interface according to claim 6, wherein the signature consists of an enciphering of a content of the packet by means of a private key forming said shared secret.

Claim 10 (original). Interface according to claim 6, wherein the signature means and at least part of the stream control means belong to a single integrated circuit, without physical access between the stream control means and the signature means.

Claim 11 (new). Method of transporting packets between an access interface of a subscriber installation and a concentrating router of a shared network, comprising the steps of:

carrying out, at the access interface, control operations on streams of packets transmitted only to the concentrating router, within the framework of a contract between the subscriber and a manager of the shared network, and

after having carried out the control operations concerning a packet to be transmitted, transmitting said packet from the access interface to the concentrating router, each packet being transmitted with a signature based on a secret shared with

the concentrating router, authenticating that the packet has been subjected to the control operations.

Claim 12 (new). Method according to claim 11, wherein the signature consists of a code word added to the content of the packet.

Claim 13 (new). Method according to claim 12, wherein said code word is calculated by hashing at least part of a content of the packet, involving the shared secret.

Claim 14 (new). Method according to claim 11, wherein the signature consists of an enciphering of a content of the packet by means of a private key forming said shared secret.

Claim 15 (new). Method according to claim 11, wherein the method further comprises a step of obtaining the signature and a step of carrying out at least some of the control operations

Claim 16 (new). Access interface for linking an access router of a subscriber installation to a concentrating router of a shared network, comprising:

means for controlling streams of packets transmitted only to the concentrating router, within the framework of a contract between the subscriber and a manager of the shared network, and

signature means receiving the packets delivered by the stream control means and producing signed packets transmitted to the concentrating router, each transmitted packet being signed and each signed packet comprising a signature based

on a secret shared with the concentrating router, authenticating that the packet has been subjected to the stream control means.

Claim 17 (new). Interface according to claim 16, wherein the signature consists of a code word added to the content of the packet.

Claim 18 (new). Interface according to claim 17, wherein the signature means include means for calculating said code word by hashing at least part of a content of the packet, involving the shared secret.

Claim 19 (new). Interface according to claim 16, wherein the signature consists of an enciphering of a content of the packet by means of a private key forming said shared secret.

Claim 20 (new). Interface according to claim 6, wherein the signature means and at least part of the stream control means belong to a single integrated circuit, without physical access between the stream control means and the signature means.